RIDASCREEN® Histamine (enzymatic)

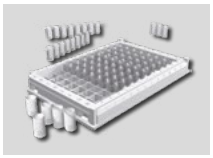
Art No. R1605

For this enzymatic assay a good pipetting technique is important. It is strongly recommended to pipette samples and standards in duplicate. As far as the sample preparation is concerned the temperature of the water bath should be 100 °C. It is important to suspend the sample completely. After centrifugation there should be no particles in the sample extract.

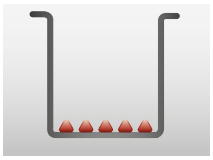
Test Procedure

Test Principle

1

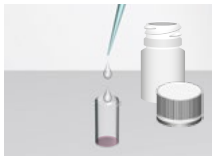


Place the required number of microwell strips in the frame.

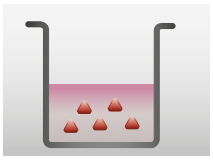


Microwells are coated with substrates (electron carrier and dye).

2



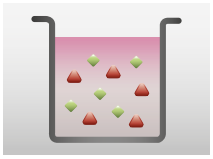
Add 150 µl of buffer.
Carefully shake the plate manually.



The addition of the clear buffer leads to a pink color in the wells.

3

Add 100 µl of standard or sample.
Carefully shake the plate manually.

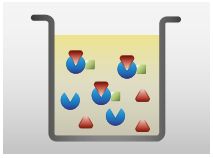


The histamine present in the sample is added to the buffer.
This is the background.

3 min incubation, then A1 is measured at 450 nm without a reference filter. A1 is typically between 0.05 and 0.15.

4

Add 10 µl of blue dyed enzyme.
Carefully shake the plate manually.

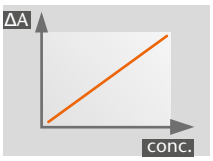


Now the enzymatic reaction starts and histamine dehydrogenase (E) converts histamine (H) in presence of the substrate (S) forming a yellow dye.

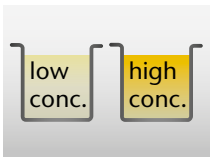
$$H + S \xrightarrow{E} \text{yellow color}$$

10 min incubation, then A2 is measured at 450 nm without a reference filter

5



For evaluation use the RIDASOFT® Win.NET.
Select A1 and A2 to calculate ΔA.



The more yellow color the more histamine is present in the sample.

Substrate **H**istamine **E**nzyme

06/2018